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36. (AS NEW) The computer readable recording medium of claim 35, wherein the control data is recorded just before the driving data.

REMARKS

In the Office Action mailed on January 3, 2002, the title was objected to as not being clearly indicative of the invention; claims 1-5 and 18 were objected to under 35 U.S.C. § 112, second paragraph, for indefiniteness; and claims 1-18 were rejected under 35 U.S.C. § 103(e) as being anticipated by Bartley (U.S. Patent No. 6,219,796 B1) ("Bartley"). The foregoing rejections and objections are respectfully traversed.

Claims 1-36 are pending in the subject application, of which claims 1, 4, 6, 9, 11, 14, 17, 19, 22, 24, 27, 29, 32, and 35 are independent. Claims 2-3, 5, 7-8, 10, 12-13, 15-16, 18, 20-21, 23, 25-26, 28, 30-31, 33-34, and 36 depend, directly or indirectly, from one of claims 1, 4, 6, 9, 11, 14, 17, 19, 22, 24, 27, 29, 32, or 35.

The title, specification, and claims 1, 4, and 18 are amended, and new claims 19-36 have been added. Care has been exercised to avoid the introduction of new matter. A Version With Markings to Show Changes Made to the specification and claims is included herewith.

Objection to the Title:

The title has been amended, taking the Examiner's comments into consideration. Withdrawal of the objection is respectfully requested.

Rejections Under 35 U.S.C. § 112, Second Paragraph:

Claims 1, 4, and 18 have been amended, taking the Examiner's comments into consideration. Claims 2 and 3 depend from claim 1, and claim 5 depends from claim 4. Withdrawal of the rejections are respectfully requested.

Rejections under 35 U.S.C. § 103(e):

Bartley discloses a method of optimizing a computer program for reduced power consumption by a packet processor having functional units that are independently controllable by instructions (Bartley, Abstract). The processor's instruction set has instructions that may be directed to a particular functional unit so as to place that functional unit in a power-down state while not being used during a program segment (Bartley, Abstract), to reduce the power consumption of the processor.

In contrast, claims 1 and 4 (as amended herein) recite (using the language of claim 1 as an example) "a plurality of control units, each of which to control a corresponding driving means according to said type of the data to be processed, *wherein the plurality of driving means is not included in the information processing apparatus.*" (emphasis added) Further, claims 6, 9, 11, and 14 (as amended herein) recite (using the language of claim 6 as an example) "controlling each of said plurality of *external* driving means according to said type of the data to be processed." (emphasis added) Claim 17 (as amended herein) recites "control data used to control other *external* driving means." (emphasis added) In Bartley, the functional units are included within the processor, and the control of the functional units results in power savings to the processor. In the present invention, the plurality of driving means are not included in the information processing apparatus; therefore, by controlling the plurality of driving means, the information processing apparatus results in power savings to the plurality of driving means, and not just a processor. Claims 1, 4, 6, 9, 11, 14, and 17 are allowable over Bartley.

In addition to being allowable based on their dependency, direct or indirect, from one of allowable claims 1, 4, 6, 9, 11, 14, or 17, claims 2-3, 5, 7-8, 10, 12-13, 15-16, and 18 recite patentably distinguishing features of their own. For example, claim 3 recites that "said control unit supplies power to each of said plurality of driving means that can process said data to be processed and stops supplying power to each of said plurality of driving means that cannot process said data to be processed." Therefore, claims 2-3, 5, 7-8, 10, 12-13, 15-16, and 18 are allowable over Bartley.

New Claims:


New claims 19-36 are allowable for the same reasons as claims 1-18, as discussed above.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited. Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Please ADD the following paragraph beginning at page 1, line 5:

--The present application is based on Japanese priority application No. 10-192009 filed on July 7, 1998, the entire contents of which are thereby incorporated by reference.--

Please DELETE the paragraph beginning at page 23, line 9.

IN THE CLAIMS:

Please AMEND the following claims:

1. (ONCE AMENDED) An information processing apparatus to [which] drive[s] a plurality of driving means according to data to be processed, the information processing apparatus comprising:

a detection unit to [which] detect[s] a type of the data to be processed; and

a plurality of control units, each of which to [which] control[s each of said plurality of] a corresponding driving means according to said type of the data to be processed, wherein the plurality of driving means is not included in the information processing apparatus.

4. (ONCE AMENDED) An information processing apparatus to [which] drive[s] a plurality of driving means according to data to be processed, the information processing apparatus comprising:

a plurality of control units, each of which to [which] control[s each of said plurality of] a corresponding driving means according to control data added to said data to be processed, wherein the plurality of driving means is not included in the information processing apparatus.

6. (ONCE AMENDED) A power control method which controls power supplied to a plurality of external driving means to be supplied with data to be processed, the power control method comprising the steps of:

(a) detecting a type of the data to be processed; and

(b) controlling each of said plurality of external driving means according to said type of the data to be processed.

7. (ONCE AMENDED) The power control method as claimed in claim 6, wherein said step (b) controls a power source which supplies the power to said plurality of external driving means.

8. (ONCE AMENDED) The power control method as claimed in claim 7, wherein said step (b) supplies power to each of said plurality of external driving means that can process said data to be processed, and stops supplying power to each of said plurality of external driving means that cannot process said data to be processed.

9. (ONCE AMENDED) A power control method which controls power supplied to a plurality of external driving means to be supplied with data to be processed, the power control method comprising:

a step of controlling each of said plurality of external driving means according to control data added to said data to be processed.

10. (ONCE AMENDED) The power control method as claimed in claim 9, wherein said step controls a power source which supplies the power to said plurality of external driving means.

11. (ONCE AMENDED) A computer readable recording medium from which a program can be read by a computer which drives a plurality of external driving means according to data to be processed, the computer readable recording medium comprising:

the program comprising:

a detection procedure for detecting a type of the data to be processed; and

a control procedure for controlling each of said plurality of external driving means according to said type of the data to be processed.

12. (ONCE AMENDED) The computer readable recording medium as claimed in claim 11, wherein said control procedure controls a power source which supplies power to said plurality of external driving means.

13. (ONCE AMENDED) The computer readable recording medium as claimed in claim 11, wherein said control procedure supplies power to each of said plurality of external driving means that can process said data to be processed and stops supplying the power to each of said plurality of external driving means which can not process said data to be processed.

14. (ONCE AMENDED) The computer readable recording medium from which a program can be read by a computer which drives a plurality of external driving means according to data to be processed, the computer readable recording medium comprising:

the program comprising:

a control procedure for controlling each of said plurality of external driving means according to control data added to said data to be processed.

15. (ONCE AMENDED) The computer readable recording medium as claimed in claim 14, wherein said control procedure controls a power source which supplies power to said plurality of external driving means.

16. (ONCE AMENDED) The computer readable recording medium as claimed in claim 14, wherein said control procedure supplies power to each of said plurality of external driving means that can process said data to be processed and stops supplying the power to each of said plurality of external driving means which [can not] cannot process said data to be processed.

17. (ONCE AMENDED) A computer readable recording medium comprising:
data comprising:

driving data to be supplied to external driving means; and
control data used to control other external driving means.

18. (ONCE AMENDED) The computer readable recording medium as claimed in claim [16] 17, wherein said control data is recorded just before said driving data.

Please ADD the following claims:

19. (NEW) An information processing apparatus to drive a plurality of driving units according to data to be processed, comprising:
a detection unit to detect a type of the data to be processed; and
a plurality of control units, each of which to control a corresponding driving unit according to the type of the data to be processed.

20. (NEW) The information processing apparatus of claim 19, wherein each of the plurality of control units controls a power source which supplies power to its corresponding driving unit.

21. (NEW) The information processing apparatus of claim 20, wherein each of the plurality of control units supplies power to its corresponding driving unit if the driving unit can process the data to be processed, and wherein each of the plurality of control units stops supplying power to its corresponding driving unit if the driving unit cannot process the data to be processed.

22. (NEW) An information processing apparatus to drive a plurality of driving units according to data to be processed, comprising:
a control unit to control a corresponding driving unit according to control data added to said data to be processed.

23. (NEW) The information processing apparatus of claim 22, wherein said control unit controls a power source which supplies power to said plurality of driving means.

24. (NEW) A power control method to control power supplied to a plurality of driving units to be supplied with data to be processed, comprising:
detecting a type of the data to be processed; and
controlling each of the plurality of driving units according to the type of the data to be processed.

25. (NEW) The power control method of claim 24, further comprising controlling a power source that supplies the power to the plurality of driving units.

26. (NEW) The power control method of claim 25, further comprising supplying power to each of the plurality of driving units that can process the data to be processed, and stopping a supply of power to each of the plurality of driving units that cannot process the data to be processed.

27. (NEW) A power control method to control power supplied to a plurality of driving units to be supplied with data to be processed, comprising:

controlling each of the plurality of driving units according to control data added to the data to be processed.

28. (NEW) The power control method of claim 27, further comprising controlling a power source that supplies the power to the plurality of driving units.

29. (NEW) A computer readable recording medium from which a program can be read by a computer to drive a plurality of driving units according to data to be processed, comprising: detecting a type of the data to be processed; and

controlling each of the plurality of driving units according to the type of the data to be processed.

30. (NEW) The computer readable recording medium of claim 29, further comprising controlling a power source that supplies power to the plurality of driving units.

31. (NEW) The computer readable recording medium of claim 29, further comprising supplying power to each of the plurality of driving units that can process said data to be processed; and stopping a supply of power to each of the plurality of driving units that cannot process said data to be processed.

32. (NEW) A computer readable recording medium from which a program can be read by a computer to drive a plurality of driving units according to data to be processed, comprising:

controlling each of the plurality of driving units according to control data added to the data to be processed.

33. (NEW) The computer readable recording medium of claim 32, further comprising controlling a power source that supplies power to the plurality of driving units.

34. (NEW) The computer readable recording medium of claim 32, further comprising supplying power to each of the plurality of driving units that can process said data to be processed; and stopping a supply of power to each of the plurality of driving units that cannot process the data to be processed.

35. (NEW) A computer readable recording medium from which a program can be read by a computer to drive a plurality of driving units according to data to be processed, comprising:
supplying driving data to driving units; and
controlling other driving units using control data.

36. (NEW) The computer readable recording medium of claim 35, wherein the control data is recorded just before the driving data.